

METHOD FOR COMPARING GENE EXPRESSION LEVEL

ABSTRACT

The present invention relates to a method for comparing and determining the gene expression level, which is very important in disease-related gene screening, early clinical diagnosis and medicine development. The present invention utilizes quantitative characteristics of bioluminescence analysis to compare gene expression levels of different individuals or samples in order to search for disease-related genes. The specific steps include: (i) labeling the mRNA of a given gene from different sources through a suitable method, and mixing the labeled fragments to obtain PCR templates; (ii) performing a polymerase chain reaction using source-specific primers and a gene-specific primer; and (iii) detecting the sequence of the amplified DNA fragments by bioluminescence analysis, the base sequence in the sequencing profile representing the gene source, and the signal intensity of each base representing the gene expression level from the corresponding source.